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Sequence Listing could not be accepted due to errors.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Durreshwar Anjum

Timestamp: [year=2008; month=3; day=20; hr=16; min=3; sec=28; ms=753;]

=====

Reviewer Comments:

<150> US 60/430,654

<151> 2002 04 02

Please insert the current Application and date as <140>, and <141>, delete the non-ascii character in date line <151>.

<210> 1

<211> 34

<212> PRI

<213> T. CRUZI

<400> Sequence: 51

The above attached sequence appears after the sequence id 50, If it is a continuation please number is as 51 and change the Total number of sequences in <160> as 57.

Application No: 10726692

Version No: 3.0

Input Set:

Output Set:

Started: 2008-02-29 21:19:36.478

Finished: 2008-02-29 21:19:46.462

Elapsed: 0 hr(s) 0 min(s) 9 sec(s) 984 ms

Total Warnings: 57

Total Errors: 257

No. of SeqIDs Defined: 50

Actual SeqID Count: 57

Error code	Error Description
E 287	Invalid WIPO ST.2 date format; Use (YYYY-MM-DD)in <151>
W 402	Undefined organism found in <213> in SEQ ID (1)
W 402	Undefined organism found in <213> in SEQ ID (2)
W 402	Undefined organism found in <213> in SEQ ID (3)
W 402	Undefined organism found in <213> in SEQ ID (4)
W 402	Undefined organism found in <213> in SEQ ID (5)
W 402	Undefined organism found in <213> in SEQ ID (6)
W 402	Undefined organism found in <213> in SEQ ID (7)
W 402	Undefined organism found in <213> in SEQ ID (8)
W 402	Undefined organism found in <213> in SEQ ID (9)
W 402	Undefined organism found in <213> in SEQ ID (10)
W 402	Undefined organism found in <213> in SEQ ID (11)
W 402	Undefined organism found in <213> in SEQ ID (12)
W 402	Undefined organism found in <213> in SEQ ID (13)
W 402	Undefined organism found in <213> in SEQ ID (14)
W 402	Undefined organism found in <213> in SEQ ID (15)
W 402	Undefined organism found in <213> in SEQ ID (16)
W 402	Undefined organism found in <213> in SEQ ID (17)
W 402	Undefined organism found in <213> in SEQ ID (18)
W 402	Undefined organism found in <213> in SEQ ID (19)

Input Set:

Output Set:

Started: 2008-02-29 21:19:36.478
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Total Errors: 257
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Actual SeqID Count: 57

Error code	Error Description
W 402	Undefined organism found in <213> in SEQ ID (20) This error has occurred more than 20 times, will not be displayed
E 323	Invalid/missing amino acid numbering SEQID (33) POS (995)
E 323	Invalid/missing amino acid numbering SEQID (33) POS (1010)
E 323	Invalid/missing amino acid numbering SEQID (33) POS (1025)
E 323	Invalid/missing amino acid numbering SEQID (33) POS (1040)
E 323	Invalid/missing amino acid numbering SEQID (33) POS (1055)
E 323	Invalid/missing amino acid numbering SEQID (33) POS (1070)
E 323	Invalid/missing amino acid numbering SEQID (33) POS (1085)
E 323	Invalid/missing amino acid numbering SEQID (33) POS (1100)
E 323	Invalid/missing amino acid numbering SEQID (33) POS (1115)
E 323	Invalid/missing amino acid numbering SEQID (33) POS (1130)
E 323	Invalid/missing amino acid numbering SEQID (33) POS (1145)
E 323	Invalid/missing amino acid numbering SEQID (33) POS (1160)
E 323	Invalid/missing amino acid numbering SEQID (33) POS (1175)
E 323	Invalid/missing amino acid numbering SEQID (33) POS (1190)
E 323	Invalid/missing amino acid numbering SEQID (33) POS (1205)
E 323	Invalid/missing amino acid numbering SEQID (33) POS (1220)
E 323	Invalid/missing amino acid numbering SEQID (33) POS (1235)
E 323	Invalid/missing amino acid numbering SEQID (33) POS (1250)
E 323	Invalid/missing amino acid numbering SEQID (33) POS (1265)
E 323	Invalid/missing amino acid numbering SEQID (33) POS (1280) This error has occurred more than 20 times, will not be displayed

Output Set:

Finished: 2008-02-29 21:19:46.462

Elapsed: 0 hr(s) 0 min(s) 9 sec(s) 984 ms

Total Warnings: 57

Total Errors: 257

No. of SeqIDs Defined: 50

Actual SeqID Count: 57

Error code	Error Description
E 336	Empty lines found between the proteins and the dna
E 336	Empty lines found between the proteins and the dna
E 336	Empty lines found between the proteins and the dna
E 336	Empty lines found between the proteins and the dna
E 336	Empty lines found between the proteins and the dna
E 336	Empty lines found between the proteins and the dna
E 336	Empty lines found between the proteins and the dna
E 336	Empty lines found between the proteins and the dna
E 336	Empty lines found between the proteins and the dna
E 336	Empty lines found between the proteins and the dna
E 336	Empty lines found between the proteins and the dna
E 336	Empty lines found between the proteins and the dna
E 336	Empty lines found between the proteins and the dna
E 336	Empty lines found between the proteins and the dna
E 336	Empty lines found between the proteins and the dna
E 336	Empty lines found between the proteins and the dna
E 336	Empty lines found between the proteins and the dna This error has occurred more than 20 times, will not be displayed
E 212	Invalid Sequence ID Number; Expected 51 as next SeqID but skipped
E 202	Invalid input format; Value must be an integer in <400> SEQID: (1)

Input Set:

Output Set:

Started: 2008-02-29 21:19:36.478
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Total Warnings: 57
Total Errors: 257
No. of SeqIDs Defined: 50
Actual SeqID Count: 57

Error code	Error Description
E 202	Invalid input format; Value must be an integer in <400> SEQID: (2)
E 249	Order Sequence Error <210> -> <212>; Expected Mandatory Tag: <211> in SEQID (3)
E 202	Invalid input format; Value must be an integer in <400> SEQID: (3)
E 202	Invalid input format; Value must be an integer in <400> SEQID: (4)
E 202	Invalid input format; Value must be an integer in <400> SEQID: (5)
E 202	Invalid input format; Value must be an integer in <400> SEQID: (6)
E 202	Invalid input format; Value must be an integer in <400> SEQID: (7)
E 252	Calc# of Seq. differs from actual; 50 seqIds defined; count=57
E 250	Structural Validation Error; Sequence listing may not be indexable

SEQUENCE LISTING

<110> KIRCHHOFF, LOUIS V
KEIKO, OTSU

<120> RECOMBINANT POLYPEPTIDES FOR DIAGNOSING INFECTION WITH
TRYPANOSOMA CRUZI

<130> PHL21311A

<150> US 60/430,654

<151> 2002 04 02

<160> 50

<170> PatentIn version 3.2

<210> 1

<211> 1521

<212> DNA

<213> T. CRUZI

<220>

<221> CDS

<222> (1)..(1521)

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Tyr Gly Pro Ser Cys Gly Ala Gly Trp Ser Ala Leu Arg Gly Gly	
1 5 10 15	

caa tgc caa caa cct cgt tgc aga aat ctc caa tgg cgt tgt cac ttc	96
Gln Cys Gln Gln Pro Arg Ser Arg Asn Leu Gln Trp Arg Cys His Phe	
20 25 30	

gtt tat tac gga agg act gct ggg ccc atc gta cat caa acc gta cag	144
Val Tyr Tyr Gly Arg Thr Ala Gly Pro Ile Val His Gln Thr Val Gln	
35 40 45	

ccg tac aaa tgg cgc tca tga ctt gtt tgt gtc gga cac ggg caa atc	192
Pro Tyr Lys Trp Arg Ser Leu Val Cys Val Gly His Gly Gln Ile	
50 55 60	

acg cat cat ttt tgc ccc acc tca gaa aaa aac gtt cat cac agt gtt	240
Thr His His Phe Cys Pro Thr Ser Glu Lys Asn Val His His Ser Val	
65 70 75	

tat aac agg att cca gcc gga tgt tct tca aat tag cga gaa gag tgc	288
Tyr Asn Arg Ile Pro Ala Gly Cys Ser Ser Asn Arg Glu Glu Ser	
80 85 90	

ttt gat gtt tgc cat ctg caa ttc cac gaa aat tct tgc gat taa tat	336
Phe Asp Val Cys His Leu Gln Phe His Glu Asn Ser Cys Asp Tyr	
95 100 105	

gca ggg agc cac aac ccc gaa gga gta ctg gca agt tgg aaa tgc gga	384
Ala Gly Ser His Asn Pro Glu Gly Val Leu Ala Ser Trp Lys Cys Gly	
110 115 120	
ctg cat ggg cta tca gag ttc cct cat gct cac gac cga gga gga taa	432
Leu His Gly Leu Ser Glu Phe Pro His Ala His Asp Arg Gly Gly	
125 130 135	
act cct cta cta cgg cat att aaa tgg aac ccc atc cat cat gtc ttt	480
Thr Pro Leu Leu Arg His Ile Lys Trp Asn Pro Ile His His Val Phe	
140 145 150 155	
acc cgc cac caa aac gaa gac gga agc acc cag aat ttg ccc gga tgt	528
Thr Arg His Gln Asn Glu Asp Gly Ser Thr Gln Asn Leu Pro Gly Cys	
160 165 170	
gtt gtt gca gtg gcc aca tgg gcc cat tgt ttc gct tgt gaa tat taa	576
Val Val Ala Val Ala Thr Trp Ala His Cys Phe Ala Cys Glu Tyr	
175 180 185	
caa aca tgc att tta cgt tgt tac cgc ctc caa tgt ata cat tgt aca	624
Gln Thr Cys Ile Leu Arg Cys Tyr Arg Leu Gln Cys Ile His Cys Thr	
190 195 200	
tga tgg ctc gta tca tcc gac tgg atc cat ggc cca gct cca aca ggc	672
Trp Leu Val Ser Ser Asp Trp Ile His Gly Pro Ala Pro Thr Gly	
205 210 215	
aga aaa taa tat cac taa ttc caa aaa aga aat gac aaa gct acg aga	720
Arg Lys Tyr His Phe Gln Lys Arg Asn Asp Lys Ala Thr Arg	
220 225 230	
aaa agt gaa aaa ggc cga gaa aga aaa att gga cgc cat taa ccg ggc	768
Lys Ser Glu Lys Gly Arg Glu Arg Lys Ile Gly Arg His Pro Gly	
235 240 245	
aac caa gct gga aga gga acg aaa cca agc gta caa agc agc aca caa	816
Asn Gln Ala Gly Arg Gly Thr Lys Pro Ser Val Gln Ser Ser Thr Gln	
250 255 260	
ggc aga gga gga aaa ggc taa aac att tca acg cct tat aac att tga	864
Gly Arg Gly Gly Lys Gly Asn Ile Ser Thr Pro Tyr Asn Ile	
265 270 275	
gtc gga aaa tat taa ctt aaa gaa aag gcc aaa tga cgc agt ttc aaa	912
Val Gly Lys Tyr Leu Lys Glu Lys Ala Lys Arg Ser Phe Lys	
280 285 290	
tcg gga taa gaa aaa aaa ttc tga aac cgc aaa aac tga cga agt aga	960
Ser Gly Glu Lys Lys Phe Asn Arg Lys Asn Arg Ser Arg	
295 300	
gaa aca gag ggc ggc tga ggc tgc caa ggc cgt gga gac gga gaa gca	1008
Glu Thr Glu Gly Gly Gly Cys Gln Gly Arg Gly Asp Gly Glu Ala	
305 310 315	

gag ggc agc tga ggc cac gaa ggt tgc cga agc gga gaa cgc gaa ggc 1056
 Glu Gly Ser Gly His Arg Gly Cys Arg Ser Gly Glu Ala Glu Gly
 320 325 330

agc tga ggc cgc caa ggc cgt gga gac gga gaa gca gag ggc agc tga 1104
 Ser Gly Arg Gln Gly Arg Gly Asp Gly Glu Ala Glu Gly Ser
 335 340 345

agc cac gaa ggt tgc cga agc gga gaa gca gaa ggc agc tga ggc cgc 1152
 Ser His Glu Gly Cys Arg Ser Gly Glu Ala Glu Gly Ser Gly Arg
 350 355 360

caa ggc cgt gga gac gga gaa gca gag ggc agc tga agc cac gaa ggt 1200
 Gln Gly Arg Gly Asp Gly Glu Ala Glu Gly Ser Ser His Glu Gly
 365 370 375

tgc cga agc gga gaa gca gag ggc agc tga agc cat gaa ggt tgc cga 1248
 Cys Arg Ser Gly Glu Ala Glu Gly Ser Ser His Glu Gly Cys Arg
 380 385 390

agc gga gaa gca gaa ggc agc tga ggc cgc caa ggc cgt gga gac gga 1296
 Ser Gly Glu Ala Glu Gly Ser Gly Arg Gln Gly Arg Gly Asp Gly
 395 400 405

gaa gca gag ggc agc tga agc cac gaa ggt tgc cga agc gga gaa gca 1344
 Glu Ala Glu Gly Ser Ser His Glu Gly Cys Arg Ser Gly Glu Ala
 410 415 420

gaa ggc agc tga ggc cgc caa ggc cgt gga gac gga gaa gca gag ggc 1392
 Glu Gly Ser Gly Arg Gln Gly Arg Gly Asp Gly Glu Ala Glu Gly
 425 430 435

agc tga agc cac gaa ggt tgc cga agc gga gaa gca gaa ggc agc tga 1440
 Ser Ser His Glu Gly Cys Arg Ser Gly Glu Ala Glu Gly Ser
 440 445 450

ggc cgc caa ggc cgt gga gac gga gaa gca gag ggc agc tga agc cac 1488
 Gly Arg Gln Gly Arg Gly Asp Gly Glu Ala Glu Gly Ser Ser His
 455 460 465

gaa ggt tgc cga agc gga gaa gga tat cga tcc 1521
 Glu Gly Cys Arg Ser Gly Glu Gly Tyr Arg Ser
 470 475

<210> 2
 <211> 7
 <212> PRT
 <213> T. CRUZI

<400> 2

Tyr Gly Pro Ser Cys Gly Ala
 1 5

<210> 3
<211> 46
<212> PRT
<213> T. CRUZI

<400> 3

Gly Trp Ser Ala Leu Arg Gly Gly Gln Cys Gln Gln Pro Arg Ser Arg
1 5 10 15

Asn Leu Gln Trp Arg Cys His Phe Val Tyr Tyr Gly Arg Thr Ala Gly
20 25 30

Pro Ile Val His Gln Thr Val Gln Pro Tyr Lys Trp Arg Ser
35 40 45

<210> 4
<211> 36
<212> PRT
<213> T. CRUZI

<400> 4

Leu Val Cys Val Gly His Gly Gln Ile Thr His His Phe Cys Pro Thr
1 5 10 15

Ser Glu Lys Asn Val His His Ser Val Tyr Asn Arg Ile Pro Ala Gly
20 25 30

Cys Ser Ser Asn
35

<210> 5
<211> 18
<212> PRT
<213> T. CRUZI

<400> 5

Arg Glu Glu Ser Phe Asp Val Cys His Leu Gln Phe His Glu Asn Ser
1 5 10 15

Cys Asp

<210> 6
<211> 32
<212> PRT

<213> T. CRUZI

<400> 6

Tyr Ala Gly Ser His Asn Pro Glu Gly Val Leu Ala Ser Trp Lys Cys
1 5 10 15

Gly Leu His Gly Leu Ser Glu Phe Pro His Ala His Asp Arg Gly Gly
20 25 30

<210> 7

<211> 47

<212> PRT

<213> T. CRUZI

<400> 7

Thr Pro Leu Leu Arg His Ile Lys Trp Asn Pro Ile His His Val Phe
1 5 10 15

Thr Arg His Gln Asn Glu Asp Gly Ser Thr Gln Asn Leu Pro Gly Cys
20 25 30

Val Val Ala Val Ala Thr Trp Ala His Cys Phe Ala Cys Glu Tyr
35 40 45

<210> 8

<211> 16

<212> PRT

<213> T. CRUZI

<400> 8

Gln Thr Cys Ile Leu Arg Cys Tyr Arg Leu Gln Cys Ile His Cys Thr
1 5 10 15

<210> 9

<211> 17

<212> PRT

<213> T. CRUZI

<400> 9

Trp Leu Val Ser Ser Asp Trp Ile His Gly Pro Ala Pro Thr Gly Arg
1 5 10 15

Lys

<210> 10
<211> 23
<212> PRT
<213> T. CRUZI

<400> 10

Phe Gln Lys Arg Asn Asp Lys Ala Thr Arg Lys Ser Glu Lys Gly Arg
1 5 10 15

Glu Arg Lys Ile Gly Arg His
20

<210> 11
<211> 24
<212> PRT
<213> T. CRUZI

<400> 11

Pro Gly Asn Gln Ala Gly Arg Gly Thr Lys Pro Ser Val Gln Ser Ser
1 5 10 15

Thr Gln Gly Arg Gly Gly Lys Gly
20

<210> 12
<211> 8
<212> PRT
<213> T. CRUZI

<400> 12

Asn Ile Ser Thr Pro Tyr Asn Ile
1 5

<210> 13
<211> 4
<212> PRT
<213> T. CRUZI

<400> 13

Val Gly Lys Tyr
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<210> 14
<211> 6
<212> PRT

<213> T. CRUZI

<400> 14

Leu Lys Glu Lys Ala Lys

1 5

<210> 15

<211> 6

<212> PRT

<213> T. CRUZI

<400> 15

Arg Ser Phe Lys Ser Gly

1 5

<210> 16

<211> 4

<212> PRT

<213> T. CRUZI

<400> 16

Glu Lys Lys Phe

1

<210> 17

<211> 4

<212> PRT

<213> T. CRUZI

<400> 17

Asn Arg Lys Asn

1

<210> 18

<211> 8

<212> PRT

<213> T. CRUZI

<400> 18

Arg Ser Arg Glu Thr Glu Gly Gly

1 5

<210> 19

<211> 13

<212> PRT

<213> T. CRUZI

<400> 19

Gly Cys Gln Gly Arg Gly Asp Gly Glu Ala Glu Gly Ser
1 5 10

<210> 20

<211> 13

<212> PRT

<213> T. CRUZI

<400> 20

Gly His Glu Gly Cys Arg Ser Gly Glu Ala Glu Gly Ser
1 5 10

<210> 21

<211> 13

<212> PRT

<213> T. CRUZI

<400> 21

Gly Arg Gln Gly Arg Gly Asp Gly Glu Ala Glu Gly Ser
1 5 10

<210> 22

<211> 13

<212> PRT

<213> T. CRUZI

<400> 22

Ser His Glu Gly Cys Arg Ser Gly Glu Ala Glu Gly Ser
1 5 10

<210> 23

<211> 13

<212> PRT

<213> T. CRUZI

<400> 23

Gly Arg Gln Gly Arg Gly Asp Gly Glu Ala Glu Gly Ser
1 5 10

<210> 24

<211> 13

<212> PRT

<213> T. CRUZI

<400> 24

Ser His Glu Gly Cys Arg Ser Gly Glu Ala Glu Gly Ser
1 5 10

<210> 25

<211> 13

<212> PRT

<213> T. CRUZI

<400> 25

Ser His Glu Gly Cys Arg Ser Gly Glu Ala Glu Gly Ser
1 5 10

<210> 26

<211> 13

<212> PRT

<213> T. CRUZI

<400> 26

Gly Arg Gln Gly Arg Gly Asp Gly Glu Ala Glu Gly Ser
1 5 10

<210> 27

<211> 13

<212> PRT

<213> T. CRUZI

<400> 27

Ser His Glu Gly Cys Arg Ser Gly Glu Ala Glu Gly Ser
1 5 10

<210> 28

<211> 13

<212> PRT

<213> T. CRUZI

<400> 28

Gly Arg Gln Gly Arg Gly Asp Gly Glu Ala Glu Gly Ser
1 5 10

<210> 29

<211> 13

<212> PRT

<213> T. CRUZI

<400> 29

Ser His Glu Gly Cys Arg Ser Gly Glu Ala Glu Gly Ser
1 5 10

<210> 30

<211> 13

<212> PRT

<213> T. CRUZI

<400> 30

Gly Arg Gln Gly Arg Gly Asp Gly Glu Ala Glu Gly Ser
1 5 10

<210> 31

<211> 13

<212> PRT

<213> T. CRUZI

<400> 31

Ser His Glu Gly Cys Arg Ser Gly Glu Gly Tyr Arg Ser
1 5 10

<210> 32

<211> 42

<212> DNA

<213> T. CRUZI

<220>

<221> misc_feature

<222> (1)..(4)

<223> n is a, c, g, or t

<400> 32

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42

<210> 33

<211> 3749

<212> DNA

<213> T. CRUZI

<220>

<221> CDS

<222> (833)..(2575)

<220>

<221> sig_peptide

<222> (833)..(937)

<220>
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 <222> (938)..(2575)

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 gccctttacat ttcccttttc cttcaatata ttgtttgttt gtttttgggt tctataggaa 180
 atttttaggat ccggccagcg gcataggaga ttattctctt tttttttaat tgcttaatgc 240
 gttggctctgt gtgtgtgtgt gttcccttgt gcgagctcac ggggcctaata tatgattgtt 300
 gcgcatatgc atatatatat atatatatat acatgtgtgt gtgtgtgtat atgtacgttt 360
 gttgggttgc cgctgtactc ccgctcgct gtgtctgtct ctctctctgt gtgtgtgatg 420
 ggctgcttct ctttcttttg ttgcgtccct ttattattat ttttttttt tcttctctcc 480
 cacttctctc ccggtgtggg gcacgcacag taaagataga gggagaaaata gagcgagtgt 540
 ttgtatcagt gtctccgttg cggctggtag tggtagaagg agaagaatag aagaaggaga 600
 aaaaaaaaaa aaaaaaaaaa aaaagagaga gagagagaga agggcgaacg agaaaaaaga 660
 agaagaaca tttgagaagg aattggaacg aaaattgtaa gaggaagcaa aaaaaaaaaa 720
 aaaaagtgtg tgtgtgtgag agagagagag agaggaagcc aataataata aaaagcaaac 780
 aaaaaagcaa aaacaaaaat attttagac cggacgtccc gtcttggacg tg atg ttt 838
 Met Phe
 35
 tca aaa agg acg tgc cca gca ccc ttc cgt gcg etc ctg ctg ccg gtc 886
 Ser Lys Arg Thr Ser Pro Ala Pro Phe Arg Ala Leu Leu Leu Pro Val
 30 25 20
 gtg gtg gtg gtg gtg gtg gtg gca tct gtg gcc etc cct gca gga 934
 Val Val Val Val Val Val Val Val Ala Ser Val Ala Leu Pro Ala Gly
 15 10 5
 gcg cag ttt gat tta agg cag cag cag ctg gtt ata cag gat ttc ttc 982
 Ala Gln Phe Asp Leu Arg Gln Gln Gln Leu Val Ile Gln Asp Phe Phe
 1 1 5 10 15
 atc agt cgc tcc tgc gca gga tgt tca cag ggg caa acc gat ggc cca 1030
 Ile Ser Arg Ser Cys Ala Gly Cys Ser Gln Gly Gln Thr Asp Gly Pro
 20 25 30
 agc ggt gcc ggc aca etc ttc act gcc gcc ggt ggt tgc ett ggc aaa 1078
 Ser Gly Ala Gly Thr Leu Phe Thr Ala Ala Gly Gly Ser Leu Gly Lys
 35 40 45
 gat gct tcc acg ctg ctg ttg tgt gac caa ggt ggt ggt ggc tcc agc 1126

Asp	Ala	Ser	Thr	Leu	Leu	Leu	Cys	Asp	Gln	Gly	Gly	Gly	Gly	Ser	Ser			
50				55				60										
gtg	cgt	ttg	gtg	aac	aaa	tcc	ggc	att	ttc	acc	ctt	gcc	ggt	agt	aaa	1174		
Val	Arg	Leu	Val	Asn	Lys	Ser	Gly	Ile	Phe	Thr	Leu	Ala	Gly	Ser	Lys			
65				70				75										
acg	acg	cgt	ggc	aat	caa	aat	ggt	ccg	gcg	gcg	acg	gca	ctc	ttc	aac	1222		
Thr	Thr	Arg	Gly	Asn	Gln	Asn	Gly	Pro	Ala	Ala	Thr	Ala	Leu	Phe	Asn			
80				85				90								95		
atg	ccc	cga	gct	gtg	gtg	ctt	gag	gat	gga	gcg	ctt	tac	gtg	gcg	gac	1270		
Met	Pro	Arg	Ala	Val	Val	Leu	Glu	Asp	Gly	Ala	Leu	Tyr	Val	Ala	Asp			
100				105								110						
agt	gcc	aac	aac	ctc	gtt	cga	gaa	atc	tcc	aat	ggc	att	gtc	act	tcg	1318		
Ser	Ala	Asn	Asn	Leu	Val	Arg	Glu	Ile	Ser	Asn	Gly	Ile	Val	Thr	Ser			
115				120								125						
ttt	att	acg	gag	gga	ctg	ctg	ggc	cca	tcg	tac	atc	aaa	ccg	tac	agc	1366		
Phe	Ile	Thr	Glu	Gly	Leu	Leu	Gly	Pro	Ser	Tyr	Ile	Lys	Pro	Tyr	Ser			
130				135								140						
cgt	cca	aat	ggc	gcc	cat	gac	ttg	ttt	gtg	tcg	gac	acg	ggc	aaa	tct	1414		
Arg	Pro	Asn	Gly	Ala	His	Asp	Leu	Phe	Val	Ser	Asp	Thr	Gly	Lys	Ser			
145				150								155						
cgc	atc	att	ttt	gcc	cca	ctt	cag	aaa	caa	acg	ttc	atc	aca	gtg	ttt	1462		
Arg	Ile	Ile	Phe	Ala	Pro	Leu	Gln	Lys	Gln	Thr	Phe	Ile	Thr	Val	Phe			
160				165								170				175		
ata	aca	gga	ttc	cag	ccg	gat	gtt	ctt	caa	att	agc	gag	aag	agt	cgt	1510		
Ile	Thr	Gly	Phe	Gln	Pro	Asp	Val	Leu	Gln	Ile	Ser	Glu	Lys	Ser	Arg			
180				185														